

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of transmitting a code division multiple access (CDMA) frame in a cellular communications network, the method comprising:

providing the CDMA frame so as to include a plurality of slots and at least a portion of a transmission gap (TG);

defining the transmission gap using both a reduced spreading factor (SF) and increased redundancy of information bits to be transmitted; [[and]]

transmitting the frame, including the plurality of slots, on a channel;

wherein the frame is transmitted on one of an uplink and a downlink;

spreading the information bits to be transmitted on a higher rate data signature sequence to produce a coded information signal; and

intermittently transmitting coded information signals in a compressed mode using the reduced spreading factor with a reduced spreading ratio, wherein a frame transmitted in the compressed mode includes a first part having a time duration of less than a duration of the entire frame and a second part also having a time duration of less than the duration of the entire frame.

2. (Previously presented) The method of claim 1, wherein said transmitting step comprises transmitting the frame on an uplink from a mobile station (MS) to a base station (BS) in the network.

3. (Previously presented) The method of claim 2, wherein the channel is a dedicated physical data channel.

4. (Original) The method of claim 2, wherein the transmission gap is located between first and second slots in the frame.

5. (Original) The method of claim 2, further comprising reducing the spreading factor by a factor of two, and increasing the redundancy of information bits to be transmitted so that the transmission gap length is less than a length of half the frame.

6. (Original) The method of claim 5, wherein the frame is a radio frame comprising fifteen time slots.

7. (Canceled)

8 (Previously presented) A method of transmitting spread spectrum frames, the method comprising:

providing data to be transmitted on a channel,

spreading a first portion of the data on a higher rate sequence using a first spreading factor to produce a first coded information signal including a first frame including a plurality of slots,

transmitting the first frame, including all slots thereof, on the channel;

forming a compressed mode frame by spreading a second portion of the data on a higher rate sequence using a second spreading factor to produce a second coded information signal including a second frame, wherein the second spreading factor is less than the first spreading factor so that the second frame includes at least a portion of a transmission gap having a length less than half the number of total slots in the second frame;

defining a length of the transmission gap using both increased redundancy of bits on a transport channel and the second spreading factor so that the transmission gap has a length less than a length of half the second frame; and

transmitting the second frame on the channel.

9. (Canceled)

10 (Previously presented) A compressed mode spread spectrum frame to be transmitted on a channel, the frame comprising:

a plurality of time slots;

a transmission gap provided between first and second ones of the time slots in the frame; and

wherein a length of the transmission gap is less than half of a time length of the entire frame, with the transmission gap length being defined at least in part by using a first spreading factor reduced by a factor of two relative to a second spreading factor which also may be used on the channel, and increased redundancy of bits to be transmitted, and the frame is either an uplink frame or a downlink frame.

11-31. (Canceled)